

COMMONWEALTH of VIRGINIA

Department of Health DIVISION OF SHELLFISH SANITATION

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INDIAN, DYMER AND TABBS CREEKS
Growing Area # 016
Lancaster and Northumberland Counties
Shoreline Sanitary Survey

Date: 21 January 2004 – *REVISED 29 January 2004* Survey Period: October 18, 2002 - October 31, 2003

Total Number of Properties Surveyed: 1,099

Surveyed By: R.M. Thomas, D.B. Geeson, and R.S. Morris

SECTION A: GENERAL

This survey area extends from Reference Point 16 at Bluff Point to Reference Point 17 at the first point south of the mouth of Tabbs Creek, including Barnes Creek, Henrys Creek, Indian Creek (Bells Creek, Arthur Cove, Waverly Cove, Pitmans Cove, and Long Creek), Dymer Creek (Rones Bay, Lees Cove, Hunts Cove, Johnson Cove, Duntons Millpond, Chases Cove, Apple Grove Cove, Georges Cove, and Ashley Cove), Tabbs Creek and all of their tributaries.

The topography in this area varies from 5' or less along the shoreline to a maximum of 100' at the western edges of the survey boundary.

The economy of the area is dependent primarily on agriculture, seafood, and commerce. Population is sparse to moderate in the area with the largest concentrations in the Town of Kilmarnock. All properties surveyed are served by individual on-site sewage disposal facilities. The Town of Kilmarnock is served by a sewerage system connected to a sewage treatment plant (prop. # 5). One septic tank cleaning dumpsite (prop. # 15) is located in the area.

Meteorological data indicated that 81.89" of rain fell during the survey period. A monthly breakdown follows:

October 18-31, 2002	3.35"	March	5.22"	July	7.68"
November	6.45"	April	5.22"	August	7.12"
December	4.52"	May	11.25"	September	11.08"
January, 2003	6.18"	June	4.74"	October	2.52"
February	6.56"				

Since the last survey was completed in October 1994, the number of animal pollution sources has decreased from 4 to 3. One of the sites contributes pollution directly to Tabbs Creek. Sites that produce industrial waste have decreased from 4 to 2. In this category, Rappahannock Seafood Company has gone out of business and Hurst Harvey Oil Company was bought out by Noblett Oil and Propane Company (properties adjacent to each other) which was listed on the previous survey.



Information in this report is gathered by and primarily for use of the Division of Shellfish Sanitation, Virginia State Department of Health, in order to fulfill its responsibilities of shellfish growing area supervision and classification. However, the data are made available to various agencies participating in shellfish program coordinated activities or other interested parties.

This report lists only those properties that have a sanitary deficiency or other environmental significance. "DIRECT" indicates that the significant activity or deficiency has a direct impact on shellfish waters. Individual field forms with full information on properties listed in this report are on file in the Richmond Office of the Division of Shellfish Sanitation and available for reference until superseded by a subsequent survey of the area.

Report copies are provided to the local health department for corrective action of deficiencies listed on the summary page in Section B.2 and the Department of Environmental Quality, Water Regional Office for possible action at the properties listed on the summary page in sections C.1 and C.2. The Division of Soil and Water Conservation is provided information on possible sources of animal pollution found in Section E.

Copies of Bacteriological, Hydrographic and Shellfish Closure data are available at the area office for review. Copies of the current condemnation notices and maps are available via the Internet at http://www.vdh.virginia.gov/oehs/shellfish/.

SECTION B: SEWAGE POLLUTION SOURCES

SEWAGE TREATMENT FACILITIES

- 5. **DIRECT** Town of Kilmarnock, P.O. Box 1357, Kilmarnock, 22482. Public-sewage treatment facility. 4 Employees. 841 Connections. This facility is designed for a flow of 0.500 MGD and consists of a comminutor, bar screen, duplicate flow equalization basins, 2 reactor clarifiers, 2 traveling bridge filters with ultra-violet disenfection, and a weir box. Final effluent is discharged to a tributary of Indian Creek. Has VPDES permit # VA0020788 from Dept. of Environmental Quality. For further information, see engineering study attached to the back of this report.
- 15. Occupant: Essential Systems, Inc., Route 3, Kilmarnock 22482. Owner: Charles Chase Enterprises, Inc., P.O. Box 217, Kilmarnock 22482. Public- septage disposal site. No contact. Operation consists of two bermed lagoons approximately 200'x125'x10'; one lagoon is empty and grown up with grass and the other one has been filled to approximately 4' remaining freeboard. The grass surrounding the lagoons has been recently cut.

ON-SITE SEWAGE DEFICIENCIES

- CONTRIBUTES POLLUTION (Kitchen or Laundry Waste): Occupant: 2517 Bluff Point Road, Kilmarnock, 22482. Owner: 2517 Bluff Point Road, Kilmarnock, 22482. Dwelling

 Olive and white Aluminum siding 1 story. Cracked lid on grease trap cover ~100' from ditch at 10' elevation. Sanitary notice issued 11/25/03 to field # A-42.
- 9. CONTRIBUTES POLLUTION (Kitchen or Laundry Wastes) Location: P.O. Box 1394, Kilmarnock, Va. 22482. Dwelling- White particle board 1-story. 1½" white PVC pipe draining contents of kitchen sink and washing machine onto ground surface approximately 300' from the headwaters of Pitman's Cove at 0' elevation. Sanitary Notice issued 3-28-03 to field # B78.

- 10. CONTRIBUTES POLLUTION Location: 49 Fleet's Bay Road, Kilmarnock, Va. 22482. Dwelling- Gray frame 1-story with white trim. 5 persons. Unusable privy located approximately 350' from the headwaters of Pitman's Cove at 20' elevation. Sanitary Notice issued 4-11-03 to field # B76.
- 16. CONTRIBUTES POLLUTION, *DIRECT* Location: 17430 Mary Ball Road, White Stone 22578. Dwelling- blue vinyl siding 1 story with white shutters. 1 person. Effluent erupting from uncovered septic tank onto ground surface at 20' elevation 50' from Dymer Creek headwater. Sanitary Notice issued 8-8-03 to field # 351.
- 17. CONTRIBUTES POLLUTION, *DIRECT* Location: (Crosby's Chicken), 17592 Mary Ball Road, White Stone 22578. Business white cement block restaurant. 1 person. Effluent erupting from septic tank directly into Dymer Creek headwater. Sanitary Notice issued 8-3-03 to field # 349.
- 18. CONTRIBUTES POLLUTION: Location: 39 Chase's Road, White Stone, 22578. Owner: 1631 Laurens Street, Baltimore, MD 21217. Dwelling Cream Aluminum siding 1 story with red shutters. 4 persons. Effluent erupting to ground surface from septic tank 75' from ditch at 20' elevation. Sanitary notice issued 6-20-03 to field # C-107.
- 20. CONTRIBUTES POLLUTION Location: 1403 Ocran Road, White Stone 22578.

 Dwelling gray and white house trailer. 1 Person. Septic tank has 1 broken lid and one that does not fit properly. Pipe from the house to the septic tank is clogged. Sanitary Notice issued 6-13-03 to field # 250.
- 24. CONTRIBUTES POLLUTION (Kitchen or Laundry Wastes) *DIRECT* Location: 4340 Angus Road, Richmond 23234. Dwelling gray "Travelite" house trailer with heat stack. No contact. 2" galvanized pipe from kitchen sink drain exits back of trailer at zero elevation 150' from salt marsh connecting Tabbs Creek. Sanitary Notice issued 9-29-03 to field # 168.
- 25. CONTRIBUTES POLLUTION, *DIRECT* Location: 1491 Little Bay Road, White Stone 22578. Dwelling white wood siding 2 story with gray shutters. 1 person. Effluent erupting onto ground surface from septic tank 70' from Tabbs Creek at 8' elevation. Sanitary Notice issued 10-25-02 to field # 70.
- 26. CONTRIBUTES POLLUTION Location: 1437 Locust Grove Road, Topping 23169. Dwelling Renovated former country store. Unpermitted septic system consisting of 2 above-ground polypropylene tanks connected to household drains 1 tank being used for storage of toilet wastes. Sanitary Notice issued 2-7-03 to field # 1A.

NO FACILITIES

26. NO FACILITIES – Location: 1437 Locust Grove Road, Topping 23169. Dwelling – Renovated former country store. Vault privy is unused and locked. Sanitary Notice issued 2-7-03 to field # 1A.

POTENTIAL POLLUTION

3. Indian Creek Yacht and Country Club, P.O. Box 1508, Kilmarnock 22482. Private yacht and country club. 50 employees. Manager stated that there had been drainfield failures in the past, but that they were currently working with Whay's septic service, an engineer, and Northumberland County local health to correct the problems. Drainfields appear to be in satisfactory condition at time of survey.

SECTION C: NON-SEWAGE WASTE SITES

INDUSTRIAL WASTES

- 8. Noblett Oil & Propane Company, P.O. Box 426, Waverly Avenue, Kilmarnock, Va. 22482. Business- oil storage and distribution facility. 5 Employees. Oil & gasoline is stored in three 20,000 gallon tanks and then distributed via trucks. A new 3' concrete containment wall (berm) surrounds the storage tanks and is located along the bank of Indian Creek. A 1000-gallon diesel tank is located without a berm behind the office.
- 21. Winegar's Marine Railroad and Dymer Creek Seafood (Catherine Davenport), 1005 Poplar Neck Road, White Stone 22578. Business Marine railway and finfish/soft crab processing operation. 3 employees. Observed on-site was 1x1000-gallon diesel fuel tank without a berm 40' from George's Cove. Washdown wastes from seafood processing operation drains into George's Cove. Has VPDES permit #VA0071595 from the Department of Environmental Quality.
- 22. Location: 555 Ocran Road, White Stone 22578. Pasture. No contact. Observed on-site was 1x500-gallon diesel fuel tank without a berm at 5' elevation 25' from George's Cove off Dividing Creek.

SOLID WASTE DUMPSITES

-None-

SECTION D: BOATING ACTIVITY

MARINAS

- 7. Chesapeake Boat Basin Inc., 1686 Waverly Ave. Kilmarnock, 22482. Owner: Clay Holcomb. Commercial Marina. 3 employees. 49 slips; 50 dry storage spaces. Present at time of survey were 31 pleasure boats under 26'; 8 pleasure boats 26'-39'. In dry storage were 42 pleasure boats under 26' and 9 boats 26'-39' were in dry storage. Boating services provided are fuel, water, electricity, and an in-out ramp. There are 1000 and 2000-gallon gasoline above-ground storage tanks located approximately 50' from high tide mark at 5' elevation. There is no berm around the tank. Sanitary facilities provided are 2 flush toilets and 2 lavatories for men; and 3 flush toilets and 2 lavatories for women. Sewage disposal is by septic tank with drainfield located 175' from high tide mark at 5' elevation, which appeared to be working satisfactorily at time of inspection. A sewage holding tank pumpout facility is located on site with year round services.
- 21. Winegar's Marine Railway (Catherine Davenport), 1005 Poplar Neck Road, White Stone 22578. Marine railway and fish processing plant. 3 employees. 8 slips/moorings2 /dry storage spaces available. Present at time of survey were 1 pleasure boat and 4 work boats under 26' and 1 pleasure boat and 3 work boats over 26' in wet slips; and in dry storage there was 1 work boat under 26'. Boating services provided were fuel (for owner's vessel only), water, electricity and repair. Containers are available for solid waste collection. Sanitary facility provided is 1 unisex portable toilet and is serviced monthly by Essential Systems. This toilet is also used as a portable toilet dump station facility. There is no holding tank pump-out facility provided.

23. Ocran Boat Shop, 1935 Ocran Road, White Stone 22578. Owner: F.H. Ajootian, P.O. Box 783, White Stone. Commercial marina. 2 employees. 7 slips/moorings/2 dry storage spaces available. Present at the time of survey were 1 pleasure boat under 26' and 6 pleasure boats over 26' in wet storage; and in dry storage there were 2 pleasure boats under 26'. Boating services provided are fuel, water, electricity and repair. Containers are available for solid waste collection. Sanitary facilities provided are 1 commode and 1 lavatory for men. Sewage disposal is by septic tank and drainfield, which appeared to be in satisfactory condition at time of inspection. Portable toilet dump station facilities and boat holding tank pump-out facilities are not provided at this location.

OTHER PLACES WHERE BOATS ARE MOORED

- 2. Mike Croxton Seafood, Inc. Owner: Mike Croxton, Rt.1, Box 490, Kilmarnock 22482. Business-crab shedding facility and private pier for docking certified clam boat (VA521-SS). 3 moorings. Present at time of survey were 2 work boats >26'. Boating services provided are fuel, water, and electricity at slips. Sanitary facilities are available at owner's home, which is within walking distance. Sewage disposal is by septic tank with drainfield, which appeared to be in satisfactory condition, located approximately 275' from Henry's Creek at 7' elevation. There are no boat holding tank pump-out facilities provided at this location.
- 4. Indian Creek Yacht and Country Club, P.O. Box 1508, Kilmarnock 22482. Private yacht club. 50 employees. 20 slips/2 moorings; 3 dry storage spaces. Present at time of survey were 5 pleasure boats under 26', and 1 pleasure boat 26'-39'. Boating services provided are water and electricity at slips. Sanitary facilities provided are 1 flush toilet, 1 urinal, 1 lavatory, and 1 shower for men; and 1 flush toilet, 1 lavatory, and 1 shower for women. Sewage disposal is by septic tank with drainfield, which appeared to be in satisfactory condition, located ~15'from Indian Creek at 7' elevation. Boat holding tank pump-out facilities consist of a manual pump, with a 55-gallon storage tank serviced by Essential Systems of Kilmarnock. Pump-out is available upon request.
- 6. Perdue Farms, 1671 Waverly Ave. Kilmarnock, Va. 22482. Manager: M. Heath Bray. Business grain elevator on Waverly Ave. 2 employees. 3 moorings. There were 3-grain barges & 1 tugboat present at time of survey. Boating services provided are water & electricity on dock. Sanitary facilities provided are 1 flush toilet and I lavatory for men. Sewage disposal is by septic tank with drainfield, which appeared to be in satisfactory condition, located approximately 100' from Indian Creek at 12' elevation. There are no boat holding tank pump-out facilities provided at this location.
- 12. R&R Unlimited, Inc., White Stone, 22578. Owner: W.L. Blankenbaker, President. 2350 Suffolk Road, Charlottesville, 22901. Community Pier. No Contact. 4 slips/5 moorings. Present at time of survey were 3 pleasure boats under 26'. Boating services provided are water and electricity at slips. Has an exemption to the requirements to provide boat holding tank pump-out facilities and sanitary facilities.
- 13. Blue Water Point Estates. Owner: Blue Water Point Homeowners Association, P.O. Box 1687, Kilmarnock 22482. Community Pier. No contact. 10 slips/moorings. Present at time of survey were 7 pleasure boats under 26' at the pier. There are no boating services provided at this location. Has exemptions to the requirements to provide boat holding tank pump-out facilities and sanitary facilities.

UNDER SURVEILLANCE

19. Dymer Shores Property Owner's Association, Rt.1, Box 655, White Stone 22578. Private boat launching facility. No contact. 4 moorings. There were no boats present at time of survey. The only boating service provided is an in-out ramp. There are no sanitary facilities and no boat holding tank pump-out facilities provided at this location.

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 11. Location: 489 Fleet's Bay Road, Kilmarnock 22482. Dwelling white frame 2-story with black shutters. 4 persons. Present at time of survey were 2 cows, 4 goats, 9 chickens and 2 guineas. These animals were in a fenced area with a small shed/stable, with manure left in pasture approximately 350' from Pitman's Cove.
- 14. George E. and Michelle L. Simmons, 527 Simmons Lane, White Stone, 22578. Pasture. Present at time of survey were 5 horses in fenced pasture. Manure is left on ground approximately 5' from ditch at 20' elevation.
- 25. DIRECT Location: 1491 Little Bay Road, White Stone 22578. Dwelling white wood siding 2 story with gray shutters. 1 person. Present at time of survey were14 cows in a fenced pasture with direct access to Tabbs Creek. There were 8 horses in a fenced in stable compound approximately 200 yards from Tabbs Creek. Manure is left on the ground.

SUMMARY

Area # 016 Indian, Dymer, and Tabbs Creeks 21 January 2004 – *REVISED* 29 January 2004

SECTION B: SEWAGE POLLUTION SOURCES

- 1. SEWAGE TREATMENT WORKS
 - 1 DIRECT # 5
 - 1 INDIRECT # 15
 - 2 B.1. TOTAL
- **2. ON-SITE SEWAGE DEFICIENCIES** Correction of deficiencies in this section is the responsibility of the local health department.
 - 3 CONTRIBUTES POLLUTION, DIRECT # 16, 17, 25
 - 4 CONTRIBUTES POLLUTION, INDIRECT # 10, 18, 20, 26
 - 1 CP (Kitchen or Laundry Wastes), DIRECT # 24
 - 2 CP (Kitchen or Laundry Wastes), INDIRECT # 1, 9
 - 0 NO FACILITIES, DIRECT None
 - 1 NO FACILITIES, INDIRECT # 26
 - 11 B.2.TOTAL
- **3. POTENTIAL POLLUTION** Periodic surveillance of these properties will be maintained to determine any status change.
 - 1 POTENTIAL POLLUTION #3

SECTION C: NON-SEWAGE WASTE SITES

- 1. INDUSTRIAL WASTE SITES
 - 0 DIRECT None
 - <u>3</u> INDIRECT # 8, 21, 22
 - 3 C.1. TOTAL
- 2. SOLID WASTE SITES
 - 0 DIRECT None
 - 0 INDIRECT None
 - 0 C.2. TOTAL

SECTION D: BOATING ACTIVITY

- 3 MARINAS # 7, 21, 23
- 5 OTHER PLACES WHERE BOATS ARE MOORED # 2, 4, 6, 12, 13,
- <u>1</u> UNDER SURVEILLANCE # 19
- 9 D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 1 DIRECT # 25
- 2 INDIRECT # 11, 14
- 3 E. TOTAL

INDIAN, DYMER, AND TABBS CREEK Lancaster and Northumberland Counties

Engineering Study
Date: 13 June 2003
By: R.S. Morris

This report is provided to supplement the current shoreline sanitary survey with information on facilities of sanitary engineering importance. It is necessary to include data on sewage treatment plants due to the large populations or volumes of waste these installations treat that cause them to significantly impact water quality. The effect of discharges, sewage bypasses, or equipment malfunctions are definite public health hazards and vital factors in proper evaluation of the area classification. Included is a brief description of these facilities.

Town of Kilmarnock Sewage Treatment Facility

Present during inspection was Keith Robertson, chief operator of the Kilmarnock Sewage Treatment facility, Richard Morris, Division of Shellfish Sanitation.

Treatment facilities consist of a Helisieve with a bar screen on an alternate flow channel, duplicated flow equalization basins, 2 reactor clarifiers, 2 traveling bridge filters, U.V. disenfection, a weir box with 90 degree V-notch for flow measurement, and an air diffuser for post aeration.

The treatment plant serves a population of approximately 1244 with 841 connections and operates under VPDES permit #0020788 from DEQ. Permit effluent limits are for a flow of 0.500 MGD., suspended solids of 16 mg/l, 200 geometric mean for fecal bacteria, and 6.5 mg/l dissolved oxygen. Effluent is discharged into a tributary of Indian Creek. Sludge is removed by Recyc Systems Inc. for land application.

Flow measurement is by ISCO Ultrasonic meter with totalizer and chart recorder.

Raw sewage is transported to the plant by gravity and four pump stations, of which only one is located on this area watershed.

